RE-INVENTING PEOPLE POST COVID

Relevant for: Developmental Issues | Topic: E-governance - applications, models, successes, limitations, and potential incl. Aadhaar & Digital power

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Marshall McLuhan, the visionary Canadian philosopher, conceived the idea of the World Wide Web three decades prior to its advent. Through his seminal book, The Gutenberg Galaxy: The Making of Typographic Man, McLuhan popularised the idea of the world being a "Global Village", i.e. the phenomenon of being more interconnected as a result of media technologies. While a lot of his prophetic insights are still relevant, his axiom, "The medium is the message", holds significance in the context of the COVID-19 pandemic, especially when applied to the role of technology. McLuhan argues that technologies are not mere inventions that people use, but are the very instruments through which people are "re-invented".

It is too early to fully comprehend what the pandemic means for the "Global Village" in the long term, but one impact is certain: There is an unprecedented increase in the adoption of technology across sectors. The pandemic situation is catalysing and taking technology adoption to new heights, breaking into areas where there traditionally might have been reluctance and scepticism. Almost overnight, uncountable schools and colleges have moved their classes online, work from home is now not just a buzzword but a sociocultural phenomenon, and tele-medicine is no longer an obscure word in the dictionary of doctors, as more and more patient consultations are being carried out via WhatsApp.

The pandemic has also set a new record with respect to expediting public behavioural change. News media is flooded with pictures of people standing in queues in an orderly manner (with some exceptions), observing social distancing norms and awaiting their turn at stores. This is no mean feat — especially in a demographically diverse country like India — and might even have been considered impossible in the pre-COVID era.

There has never been a more opportune moment to roll-out technology-enabled reforms in sectors which have traditionally been considered difficult to penetrate. The Public Distribution System or the Targeted Public Distribution System (TPDS) is one such system. Given that the TPDS is a critical system in India's fight against COVID-19, it is imperative for the system to meet the urgent needs of citizens. Since people are now more open to behavioural change and to adopting technology-driven solutions, now is the time to improve the efficacy of the TPDS.

Food security, social security and national security are all intricately related, and the TPDS is a common factor supporting these pillars of India's security. Food security lies at the heart of social security, and the TPDS is the primary channel for food security-related service delivery. The importance of the TPDS is highlighted by the fact that it has been in place since World War II, and continues to play a key role in government services. When the Rs 1.7 lakh crore COVID-19 relief package was announced on March 26, 2020, support for 12 million tonnes of food grain under the Pradhan Mantri Garib Kalyan Anna Yojana was earmarked. The delivery of this support — for nearly 800 million citizens — is to be carried out through TPDS, which enables outreach to India's most vulnerable.

India's PDS began as a universal programme targeting food shortage, but in 1997, as part of fiscal consolidation, it was restructured to focus on the poor and marginalised. More recent efforts have also explored how the system could facilitate improved nutritional support for individuals covered by TPDS. It is now more important than ever before to ensure every eligible

individual gets timely access to the programme's benefits. Amidst the lockdown, migrant labourers were stranded in different parts of the country, and without ration cards, have not been able to avail their PDS benefits as the cards are not portable in every state. Some states have taken extraordinary measures. To prevent the denial of service due to exclusionary errors or due to ration card portability issues, the Delhi government decided to distribute the benefits to everyone.

In December 2016, an evaluation by NITI Aayog (Development Monitoring and Evaluation Office) looked at the role of the PDS in shaping household and nutritional security. The study relied on data from the Indian Human Development Surveys (2004-05 & 2011-12), collaboration between the National Council of Applied Economic Research and University of Maryland. In terms of coverage, the evaluation determined that PDS cards were ubiquitous, but made an interesting observation — despite a decrease in the poverty ratio, the number of Below Poverty Line (BPL) and Antyodaya Anna Yojana (AAY) cards were increasing. The percentage of surveyed households which did not have a card was 16.7 per cent (2004-05), and 13.9 per cent (2011-12). Of these households, 43 per cent and 47 per cent did not have coverage and cited "bureaucratic difficulties" as the principal reason for not having a card. Consequently, many who direly needed PDS support are not able to avail the benefits in the absence of ration cards.

The government is cognisant of the issues related to beneficiary coverage. Different states have already begun running pilots to solve the bureaucratic challenges of the ration card. The One Nation One Ration Card programme has been mooted to ensure portability of the ration card across the country, whereas other proposals have also considered replacing it with something more universal like the Aadhaar. The Ministry of Consumer Affairs, Food and Public Distribution recognised that rolling out a biometric/Aadhaar-based authentication of beneficiaries could help improve the efficiency and transparency of the distribution process. In 2018, the department, in association with 12 states/UTs, began the limited implementation of the Integrated Management of Public Distribution System (IM-PDS) with a total budgetary overlay of Rs 127 crore to initiate the reforms process. The main focus is the portability of ration cards (a card issued in one state will work for all states) and the deployment of electronic Point of Sale (ePoS) at Fair Price Shops (FPS).

However, the problem is that only 90 per cent of the total 23.4 crore ration cards under the National Food Security Act have been seeded with the Aadhaar number of at least one household member. Also, this facility is available only in the 12 states that have participated in the programme. The department issued circulars to ensure that genuine beneficiaries and households would not be denied their entitlements on the grounds of technical authentication failure at ePoS or for not possessing Aadhaar. In light of the pandemic, any proposal seeking to universalise the IM-PDS will have to tackle these two major challenges: a) Ten per cent of ration cards not linked to Aadhaar would have to be brought on board and within a short time-frame, without which the beneficiary exclusion issues of the ration card system would persist and; b) all fair price shops in India would have to be brought online either through ePoS or other suitable common online platforms. Given that the coverage of such a system would have to be extended pan-India, it remains to be seen how fast such a countrywide platform/system can be deployed.

The other opportunity with regard to improving TPDS coverage is in under-served areas. If a common system were to be rolled out to fair price shops, it could allow for the creation of PPP arrangements between state governments and smaller kirana shops. These shops can be on-boarded quickly and plugged into the TPDS network. They maybe accorded a special "kirana+" status, and can be leveraged to improve coverage in under-served areas or in other cases in times of national disasters and emergencies.

The NITI Aayog's 2016 evaluation of the PDS also noted that a major problem lies in supply

chain leakages. Recent news reports have also raised the issue of errant dealers at FPSs who have inconvenienced beneficiaries by charging arbitrary prices. In the aftermath of the pandemic, these issues need to be resolved. The IM-PDS has taken the first step by initiating end-to-end computerisation of the TDPS. While this is an important first step to understand and track leakages, it is far from sufficient.

A robust, integrated system needs to be rolled out, which would ideally record every single transfer or transaction at every conceivable point in the supply chain, so that these transactions are not just digitised, but also captured in real-time. Even a decade ago, this would have been a very difficult endeavour. But with the advent of cheap IoT (Internet of Things) sensors, proliferation of blockchain technologies, increase in mobile devices and cellular data — it has never been more feasible.

A blockchain ledger can be used to track every single transaction on a distributed public ledger system, where any personal beneficiary identifier is anonymised. The potential for every transaction to be verified and tracked with appropriate privacy measures can greatly enhance how the PDS functions, as transactions can be tracked right from the allocation of food grains, to their transportation, to the delivery to intended beneficiaries. The data stored in the "public ledger" would be randomised and disaggregated, making it impossible for it to be manipulated or changed.

The best part about the use of a distributed ledger system is that it's not just theoretical conjecture — it is already being piloted in Telangana. With support from Tech Mahindra, Telangana has launched India's first blockchain district. Items such as grain bags are QR-coded and tracked for quality, quantity etc. The system can flag/alert if there is a discrepancy at any level of the transportation process, and ensures that the supplies reach the intended destination/beneficiaries. Distributed ledgers, when coupled with a biometric authentication systems, can also help in the rollout of cashless transfers of food grain.

Kerala has been applauded for coordinating an effective response to COVID-19. Given that supply chains have been disrupted, the state adopted a unique strategy to evaluate its supply chain — the daily stocks of both wholesale and retail traders. The system tracks essential supplies at the district level, and was developed and designed in five days. The Government of Kerala partnered with the Indian Institute of Information Technology and Management to devise this solution, which leveraged GSTN (E-Way Bill) data which has the information of both the buyer and seller.

The system will eventually be hosted on a blockchain, and can be a great tool to monitor price and supply availability. The system is innovative, and for the first time, covers both private and public sector players. This gives a comprehensive picture of the supply chain and food security. The implementation of the system needs to be taken up as a case study so the government can develop more effective tools to track the price of food commodities, and the status of food security, across India. Given the short time frame within which this was done, it could be implemented in other states. However, a similar level of data "readiness" would be required.

Both the impact of COVID-19 and climate change poses a threat to India's economic security. If the economy is a house and COVID-19 the fire that has engulfed the house, then the spectre of climate change is the unseen gentle wind that slowly ensures the ruin of the house. While the impact of COVID-19 is visible, immediate, and very real in terms of public awareness, the impact of climate change has failed to capture public imagination in the same way. However, the discussion around it has increased over the years thanks to unprecedented wildfires, droughts, extreme flooding and the resurgence of locust swarms.

The dual impact of climate change and the COVID-19 pandemic is likely to adversely impact the economy in the short and long run, and we are yet to fully comprehend the impact of the looming crisis. In addition to the poor and marginalised, citizens in the middle-income groups may also face unprecedented economic difficulty. This can, however, be mitigated by re-visiting the TPDS and by expanding its coverage to become a universal programme again. The pandemic has brought in uncertainty across the world. India appears to be better positioned to fight it vis-à-vis many other countries, but robust contingencies need to be developed.

The contours of human civilisation are being forced to change as a result of this pandemic. McLuhan's interconnected "global village" has effectively been paralysed by an invisible strain of protein cells. The pandemic has spurred a drastic increase in the pace of innovation in India. This increased pace is key to helping India build resilience to the impact of COVID-19. Innovative technological solutions are being invented and applied to address long-standing issues. Returning to McLuhan's framework — The medium is the message — it remains to be seen how the invented technologies will re-invent India and its people.

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